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Melissa A. Hornbein

Western Environmental Law Center

103 Reeder's Alley

Helena, Montana 59601

(406) 708-3058

hornbein@westernlaw.org

Shiloh S. Hernandez

Earthjustice

Northern Rockies Office

313 East Main Street

P.O. Box 4743

Bozeman, MT 59772-4743 (406) 586-9692 ext. 1929

Counsel for Plaintiffs

Samantha Ruscavage-Barz (NM Bar

#23276)

WildEarth Guardians

301 N. Guadalupe At., Ste. 201.

Santa Fe, NM 87501 (505) 401-4180

sruscavagebarz@wildearthguardians.org

Admitted pro hac vice

Counsel for Plaintiff WildEarth

Guardians

IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MONTANA BILLINGS DIVISION

WILDEARTH GUARDIANS and MONTANA ENVIRONMENTAL INFORMATION CENTER,

Plaintiffs,

VS.

DEB HAALAND, et al.,

Defendants.

Case No. CV 17-80-BLG-SPW-TJC

DECLARATION OF WADE SIKORSKI

I, Wade Sikorski, in accordance with the requirements of 28 U.S.C. § 1746 hereby declare:

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- 1. I am over eighteen years of age and a citizen of the United States. The facts and opinions set forth in this declaration are based on my personal knowledge and experience.
- 2. I live on my family's ranch approximately 20 miles south of Baker, Montana, and approximately 100 miles east and downwind of the Colstrip power generation plant. My great-grandfather homesteaded this land in 1911. I have lived on the ranch for my entire life, except my years spent in college and graduate school and one year working in New Mexico. I expect to live in Montana for the rest of my life.



- 3. I am a member of Montana Environmental Information Center (MEIC). I have been a member of MEIC since the early 1990s. I first became involved with MEIC because of concerns I had about a PCB incinerator moving to my community and the risks it posed to human health and the environment.
- 4. I have an undergraduate degree from the Montana State University at Bozeman and a Ph.D. in political science from the University of Massachusetts at Amherst. My academic specialty is in contemporary political theory and political ecology, subjects on which I have published books and articles.
- 5. I work on my family's ranch from spring to fall and write books and articles during the winter. We raise wheat, lentils, safflower, alfalfa, and corn on our farmland and several hundred head of cattle on our pastures.
- 6. For me, as a farmer, the first problem with climate change is that nothing is normal anymore, not the temperatures, not the rainfall, not even the direction of the wind. To develop best practices for their farms, farmers depend on continuity from season to season. Whatever the variations from year to year, so long as the climate reverts to a norm, farmers can continue as they have, knowing when to plant, what to plant, and how to plant. But when the climate starts changing, and each year is nothing like the last, past experience is no guide to future success.
- 7. Looking at the graphs projecting climate change, I used to think climate change would happen slowly, perhaps not even perceptibly, with gradually changing records the only proof it was happening, but that has not been my experience. Instead, I've been

Case 1:17-cv-00080-SPW Document 144-6 Filed 08/19/21 Page 4 of 11 struck by how extreme weather events, things like droughts, floods, heatwaves, hailstorms, and tornadoes, have become both more frequent and severe in Montana.

- 8. About a decade ago, for example, a hailstorm hit us, completely wiping out our crops close to home, sparing only a few fields miles away. It was the worst hailstorm ever for my family. I know this because my great grandfather built a Quonset back in the 1930s. It was made of heavier steel than is common now, and before this storm, only a few dents had accumulated from all previous hailstorms. The pings were perhaps, on average, an arm's length apart. But after that storm, the pings were within inches of each other. Our Quonset looked like a golf ball, as did our pickups.
- 9. That hailstorm might have been a once in a lifetime event, or at least one would hope, but then, last year, another one as bad came just as we were beginning harvest. This time the hailstones weren't as large, but the wind blew harder, and it came when our spring wheat and lentils were ripe. It totally destroyed our crops. One of our spring wheat fields might have done over 40 bushels an acre, but we didn't even attempt to combine it because everything lay flat on the ground. Some of our other spring wheat fields were still standing and looked like there might be something left in the heads, but when I tried to combine it, almost nothing ended up in the grain tank.

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10. This year, we are suffering from maybe the worst drought of my lifetime. In southeastern Montana we all remember the drought in 1988, but I think this year is worse. I remember combining most of our fields back then, even though we didn't get much. But this year, we didn't even try to combine any of our spring wheat, and I doubt we will try to combine any of our lentils, safflower, or corn either. I did combine some of our winter wheat, getting just enough for seed. We will have to buy spring wheat seed next year, and it will, no doubt, be very, very expensive because none of our neighbors are combining any of their spring wheat either. Below is a photo of our spring wheat after the drought, the heat, the wind, and the grasshoppers did it in.

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11. When I was a child, we occasionally heard of tornadoes in North Dakota, but we never had them where we lived. Never. Now, almost every other year, we are getting tornadoes that set new records for Montana. One of them assaulted Baker, the town near my family's farm, about a decade ago, filling the lake in the center of town with debris, costing the taxpayer millions of dollars to dredge. More recently, another tornado picked up a neighbor's tractor, and bounced it over the Ekalaka hills, breaking all but the rear end into pieces small enough to pick them up and throw them in the pickup. Things like this never happened when I was a child.

- 12. On our ranch, we have a flood irrigation system of about 60 acres, built by my father in the early 1960s. When I was a child, the spring melt usually filled the system of dikes with runoff from top to bottom. Some years, we may have had 2 or 3 times as much water as we needed to flood all the dikes. One of my most vivid memories of my childhood was standing on a muddy dike in the middle of this irrigation system, water all around me like a sea. I was little more than 3 feet tall, and would have been in over my head on either side if I were to fall in.
- 13. However, most years in the last couple of decades, I could walk the lands between the dikes and not even get the bottoms of my shoes wet. Our dikes are no longer filling with water like they were when I was a child. Our annual precipitation has declined, but not that much. What has happened is our long, cold winters are now shorter and warmer. Throughout my childhood, through high school, and even when I went to college, the snow on our place typically accumulated until spring and then melted in a rush. Now, the snow typically melts away throughout the winter and by spring, the ground has thawed and the water soaks in.
- 14. This has caused a considerable economic loss to my family. Because of climate change, our hay yields from this irrigation system are now less than half of what they used to be. Depending on the market for hay, in any given year the loss in yield may cost us thousands of dollars.
- 15. On another part of our ranch, we have a draw about a mile long that is mostly filled with Green Ash trees, but also some buffalo berry, chokecherry, and a few

Case 1:17-cv-00080-SPW Document 144-6 Filed 08/19/21 Page 8 of 11 cottonwood trees. A decade or so ago, we discovered that the Green Ash trees are all aging, near death, with no new trees to replace them. We invited Peter Lesika to our ranch to try and figure out what was wrong. Lesika is a research scientist who had a grant from the Bureau of Land Management, Montana Department of Fish, Wildlife, and Parks, and the Grazing Land Conservation Initiative to study the decline of Green Ash groves in Montana. Thinking loss of the buffalo herds explained what was happening, he tried to mimic the impact they had on the land. He had us fence in two test plots on the draw for three years. One we grazed heavily with cattle, forcing them to act like buffalo, and the other we did not graze at all. However, when the study was complete, Lesika told us that he believes the trees are not reproducing because of a change in the hydrological cycle due to climate change, not changes in grazing. He published a paper in 2009 in Rangeland Ecology Management, entitled, "Can Regeneration of Green Ash (Fraxinus pennsylvanica) be Restored in Declining Woodlands in Eastern Montana?" In it, he wrote:

Hydrologic conditions conducive to recruitment and growth of green ash seedlings in eastern Montana may have been sporadic, even prior to the introduction of exotic sod grasses into the woodland understory. These conditions may be even less common now in a warmer climate. The study areas had above-average spring (March–May) moisture over the course of the study, but winter (December–February) precipitation was 28% lower than the 20th-century mean (NOAA data accessed online; Western Regional Climate Center 2009). Perhaps more importantly, the winters averaged nearly 2°C warmer than in the last century. These conditions probably reduced snow accumulations, early spring flows, and the deep water penetration into the soil likely needed for prolonged growth of ash seedlings. Such changes in hydrology could reduce the opportunity for recruiting green ash from

Case 1:17-cv-00080-SPW Document 144-6 Filed 08/19/21 Page 9 of 11 seed into the canopy in many woodlands. *Id.* at 569 (internal citations omitted).

- 16. When I was a child, the trees were so thick that it was almost impossible to walk through the draw. Now, it is easy. There is enough space between the trees now that you could drive a four-wheeler about anywhere you wanted in the draw. Snow does not accumulate on the ground the way it used to, piling up deep in the draws where the trees are located. Without the heavy snow to water the sprouts and delay the grass, the trees are finding it too hard to compete against the grass in the draws. Because of climate change, we are losing the dozen or so acres of native trees that we have on our ranch. If greenhouse gas emissions continue to increase, I fear that in a few decades most of the trees will be gone, diminishing the beauty of our place, as well as disrupting vital habitat for wildlife.
- 17. I have noticed something else that is happening because of our warmer winters. Steel fence posts are being driven into the ground by spring blizzards more often now, and I find myself having to jack up the posts from the ground more often now when I make my rounds checking fences in the spring. This adds hours of work to a trip around a pasture. In the past, when snow drift built up in low areas during the winter, the wire would break, but the posts would stay where they were, held up by the frozen ground. Now, the ground isn't frozen as hard, and the posts sink into it when the snow drifts over the wires.
- 18. I have twice heard Steve Running, a climatologist based at the University of Montana in Missoula, explain what climate change will mean for people living in

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Case 1:17-cv-00080-SPW Document 144-6 Filed 08/19/21 Page 10 of 11 eastern Montana. He says that our region will become considerably more arid, with steady increases in temperature, especially in March. He says that although the data does not show any trend on precipitation changes yet, we will need twice as much rain as we currently get to grow the same amount we do now with the expected temperature increase.

- 19. Fearing what is coming, I often talk to scientists like Running, read scientific reports, and stay informed about climate change, trying to anticipate future impacts on my family, ranch, and the area where I live. From what I have learned, scientists are saying that the extreme weather events that I have been experiencing on our place are only going to get worse. Climate change will not only reduce crop yields because of higher temperatures, extreme weather, and probably more arid conditions, but also increase pest problems (grasshoppers thrive when conditions are hot and dry), increase weed problems (higher carbon dioxide levels benefit weeds more than they do crops), and decrease the effectiveness of herbicides.
- 20. The only way I can protect my family's ranch and its future profitability from the damaging effects of climate change is to try to stop projects like the continued operation of the Spring Creek Mine, which will cause greenhouse gas emissions to climb and climate change to accelerate. As a farmer and rancher, seeing what I have seen over my lifetime, I know we cannot grow anything like the amount of food that we now grow if what scientists are predicting comes to pass. I have seen how our crop yields have plummeted because of extreme weather events, and I have no doubt that what we are

suffering from this year, the drought, the heat, and the fires, may well be minor compared to what is coming. Please do not let the Spring Creek mine continue operating. The food my family grows for the world is very much at risk.

I declare under the penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Dated this 17th day of August, 2021.

Wade Sikorski